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TURBINE BLADE

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[0001] CROSS REFERENCE TO RELATED APPLICATIONS

[0002] This application is the US National Stage of International Application No. PCT/EP2004/006624, filed June 18, 2004 and claims the benefit thereof. The International Application claims the benefits of European Patent application No. 03015496.7 EP filed July 9, 2003, all of the applications are incorporated by reference herein in their entirety.

[0003] FIELD OF THE INVENTION

[0004] The invention relates to a turbine blade which has a blade height, a rotor-side end and a stator-side end, a leading edge and trailing edge and a suction side and delivery side and which is designed for use in relation to a general direction of flow, and also to a turbomachine which is equipped with such a turbine blade.

[0005] BACKGROUND OF THE INVENTION

[0006] In steam turbine construction, for example, curved guide blades are used as an embodiment of turbine blades especially when high three-dimensional flows occur which exhibit pronounced radial differences in the static pressure profile between the rotor side and the stator side, these differences arising due to deflection in the guide blades. In steam turbines, especially in low-pressure turbines with a large outflow cross section, the blade length to hub ratio is relatively high. The flow of a flow medium in the last stage of a low-pressure turbine having a large inflow cross section leads, in the case of a high blade length to hub ratio, to a radial reaction distribution which has an adverse effect on the efficiency of the steam turbine. The reaction distribution is in this case different in the radial direction and is low at the hub and high at the casing, this being felt to be a disadvantage.